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GONODACTYLUS SIAMENSIS, A NEW STOMATOPOD CRUSTACEAN FROM THAILAND

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Abstract.—The third shallow water member of the *G. falcatus* group of species from Thailand is recognized. It can be distinguished in the field by its color pattern.

Among the stomatopods collected by one of us (M.L.R.) in Thailand in 1973 was a small species of the *Gonodactylus falcatus* group which could be distinguished in the field from the two more common species of the group found there, *G. mutatus* Lanchester, 1903, and *G. ternatensis* De Man, 1902 (see Dingle, Caldwell, and Manning, 1977; Manning, 1978). This species is described here.

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Gonodactylus siamensis, new species
Fig. 1

Gonodactylus falcatus.—Reaka, 1979a:238, 252, fig. 1; 1979b:330, 333, fig. 3. [Not *Gonodactylus falcatus* (Forskål, 1775).]

Material.—Thailand: Gulf of Thailand, Sattahip [12°40′N, 100°52′E]; intertidal coral rubble reef flat exposed at low tide; 2, 4 July 1973; M. L. Reaka, and R. L. Caldwell, leg.: 10 ♂, 21–39.5 mm, 13 ♀, 16–38 mm (♀, 36 mm long, holotype, USNM 181673; remainder of specimens are paratypes, USNM 181674).

Description.—Rostral plate longer than broad, median spine relatively long; anterior margin of plate sloping anteriorly or perpendicular to body line; basal part of plate short, lateral margins divergent, anterolateral angles acute but broadly rounded. Ocular scales small, breadth of each no greater than width of rostral spine at base. Anterior 5 abdominal somites lacking transverse grooves, sixth somite with 6 carinae, variously inflated, usually unarmed posteriorly in females, occasionally unarmed in small males also; median carinule absent. Small black spot faintly indicated on each side of sixth somite between submedian and intermediate carinae. Abdominal width/carapace length index ranging from 875 in smallest to 780 in largest

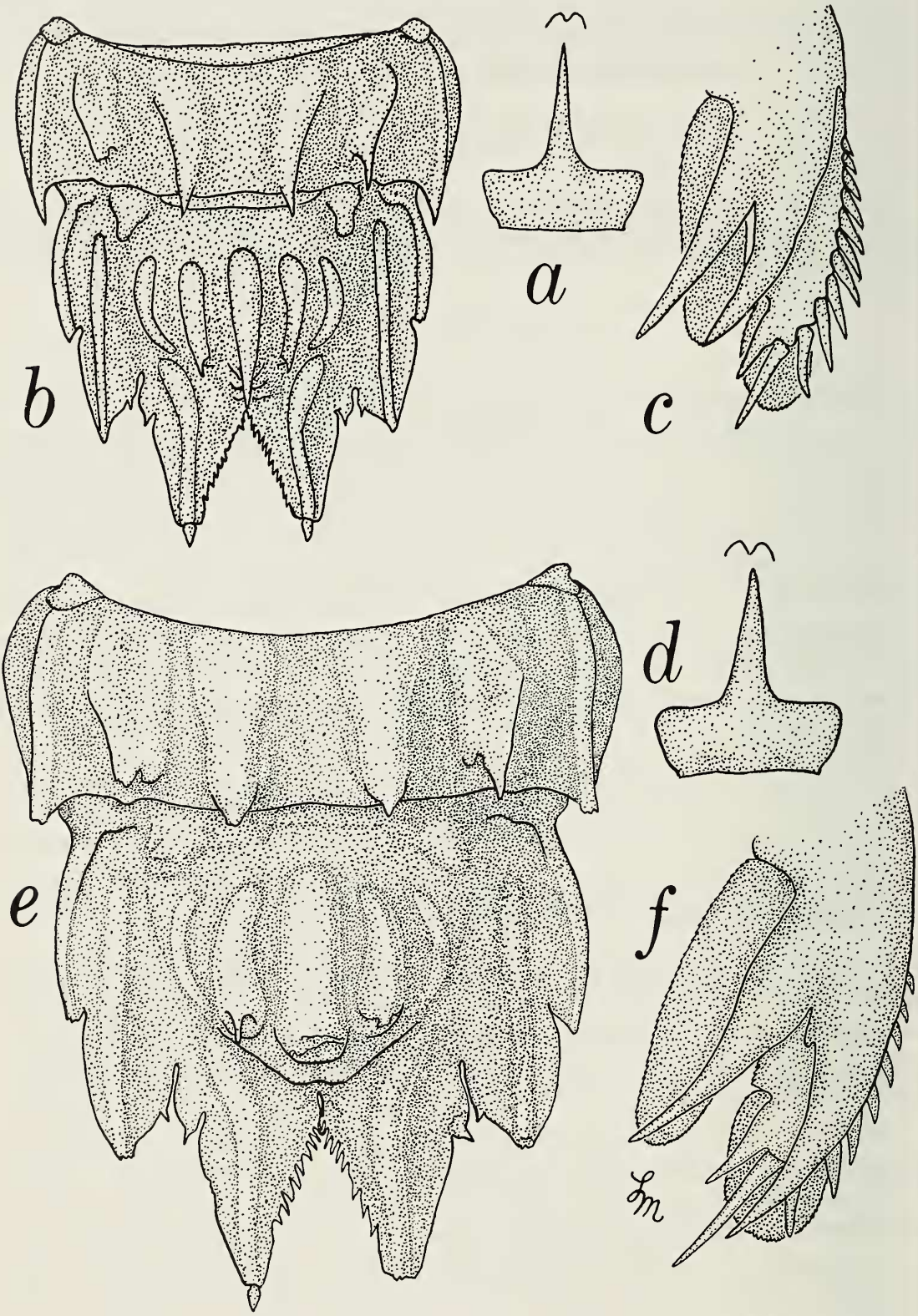

Fig. 1. *Gonodactylus siamensis*: *a–c*, Female, 25 mm long; *d–f*, female, 36 mm long. *a*, *d*, Rostral plate and ocular scales; *b*, *e*, Sixth abdominal somite and telson; *c*, *f*, Uropod, ventral view.

specimens. Telson with length and width subequal or length greater. Dorsal carinae of telson inflated, especially in males, median and accessory medians each usually with apical spinule flanked ventrally by rounded excavation; dorsal carinae slender in juveniles, more inflated in adults. Knob distinctly bilobed. 3 pairs of marginal teeth present, all relatively slender in females, submedians with movable apices, intermediates and laterals usually with slender, sharp apices. Intermediate denticles sharp, distinct. Anterior surface of telson with faint indication of dark spot on each side anterior to anterior submedian carina. Ventral surface of telson with low postanal ridge and longer, sharper carina on each submedian tooth. Uropodal endopod with single line of marginal setae, exopod with 10–13, usually 11, graded movable spines on outer margin of proximal segment; basal prolongation with 1 lobe proximally on inner margin of outer spine.

Color in life.—Females uniform olive or chocolate brown, or green, frequently speckled; meral spot yellow with light brown infusion; 4 black spots on sixth abdominal somite and telson. Males black, dark green, or olive green, with red posterior edges on abdominal somites. Antennal scales blue; setae blue proximally, red distally.

Measurements.—Total lengths of males 21 to 39.5 mm, of females 16 to 38 mm. Other measurements, in mm, of female holotype: carapace length 9.0; rostral plate length 2.8, width 2.6; fifth abdominal somite width 7.3; telson length 6.3, width 6.0.

Remarks.—Two other species of the *G. falcatus* group of species are known to occur in Thailand (Dingle, Caldwell, and Manning, 1977; Naiyanetr, 1980). *Gonodactylus ternatensis,* the largest of the three species, attaining a total length in Thailand of 87 mm, can be distinguished immediately from *G. mutatus* and *G. siamensis* by its long rostral spine and, slender, sharp carinae as well as an undivided knob on the telson. In life it agrees with *G. siamensis* and differs from *G. mutatus* in having red intersegmental bands on the body as well as blue antennal scales in the male; it differs from both species in having an orange rather than a yellow meral spot. *Gondactylus siamensis* and *G. mutatus* are of similar size and are superficially similar morphologically. In life, they can be distinguished immediately by the blue antennal scale in the former, a red, orange, or yellow antennal scale in the latter; in addition, *G. mutatus* lacks the posterior red bands on the body segments.

Gonodactylus siamensis differs from *G. mutatus* in the shape of the rostral plate, with the apical spine longer and the basal portion shorter, and the telson is usually longer, with longer, slenderer marginal teeth in the new species.

In these specimens, the abdominal width/carapace length index shows a wide variation between young and old specimens, as follows:

Carapace length, mm	No. of specimens	Index	
		Range	Mean
4	1	—	875
5	3	833–860	844
6	2	833–841	837
7	6	819–877	854
8	1	—	852
9	7	778–826	808
10	2	776–784	780

Many of the specimens of *G. siamensis* have damaged spines and carinae on the sixth abdominal somite and telson (Fig. 1*e*), suggesting that they are somewhat aggressive.

Etymology.—The specific epithet is derived from the old name for Thailand, Siam.

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